CHECKLIST ENVIRONMENTAL ASSESSMENT

Project Name: Water injection project: 'Montana State Unit' **Proposed Implementation Date:** Spring 2007

Proponent: MCR LLC. P.O. Box 716 Shelby, MT 59474 (406) 424-8216

Type and Purpose of Action: The purpose of this proposal is to supply water from the Wallace 12x-11 water well to a water injection system to implement a subsurface water flood project. The reason for water injection is to increase subsurface formation pressure to increase well head pressure, thus increasing production. The water source will be derived from the Mississippian Madison Formation and injected into the Jurassic Swift Formation.

Location: T37N, R4E, Sec 11 SE 1/4 (Common School) County: Liberty

I. PROJECT DEVELOPMENT		
1.	PUBLIC INVOLVEMENT, AGENCIES, GROUPS OR INDIVIDUALS CONTACTED: Provide a brief chronology of the scoping and ongoing involvement for this project.	DNRC, MMB, Subsurface/Surface owner MCR LLC, proponent James Grammer , Surface Lessee
2.	OTHER GOVERNMENTAL AGENCIES WITH JURISDICTION, LIST OF PERMITS NEEDED:	BOAG DEQ
3.	ALTERNATIVES CONSIDERED:	Deny the request

	II. IMPACTS ON THE PHYSICAL ENVIRONMENT	
	RESOURCE	[Y/N] POTENTIAL IMPACTS
		N = Not Present or No Impact will occur. Y = Impacts may occur (explain below)
4.	GEOLOGY AND SOIL QUALITY, STABILITY AND MOISTURE: Are fragile, compactable or unstable soils present? Are there unusual geologic features? Are there special reclamation considerations? Are cumulative impacts likely to occur as a result of this proposed action?	[N] Soil types within the proposed pipeline route consist of deep silt loam soils. Soils have excellent production capabilities. Reestablishment of disturbed vegetation should be highly successful. Reclamation requirements are to backfill and level the excavation. Then seed the impacted area with the existing native grass types present. The grass types and seeding rates are listed in item 7 of this assessment.
5.	WATER QUALITY, QUANTITY AND DISTRIBUTION: Are important surface or groundwater resources present? Is there potential	[Y] Ground water will be impacted as a result of this proposal. The water will be pumped from the Madison Formation and re-

	II. IMPACTS ON THE PHYSICAL ENVIRONMENT	
	for violation of ambient water quality standards, drinking water maximum contaminant levels, or degradation of water quality? Are cumulative impacts likely to occur as a result of this proposed action?	injected into the Swift. All state regulations will be implemented and followed pertaining to water flood injection.
6.	AIR QUALITY: Will pollutants or particulate be produced? Is the project influenced by air quality regulations or zones (Class I air shed)? Are cumulative impacts likely to occur as a result of this proposed action?	[N] There will be no impact to the air shed as a result of this proposal.
7.	VEGETATION COVER, QUANTITY AND QUALITY: Will vegetative communities be permanently altered? Are any rare plants or cover types present? Are cumulative impacts likely to occur as a result of this proposed action?	[Y] Vegetation will be impacted, as a 3-inch poly pipeline will be installed. The impact resulting from the pipeline installation will require a grass seed mixture of 30% Canby Bluegrass, 30% Idaho Fescue, 10% Rough Fescue, and 30% Western Wheatgrass. If drilled the rate will be 7#/acre. If broadcast the rate will double.
8.	TERRESTRIAL, AVIAN AND AQUATIC LIFE AND HABITATS: Is there substantial use of the area by important wildlife, birds or fish? Are cumulative impacts likely to occur as a result of this proposed action?	[N] There will not be any adverse impact to fish, wildlife, or birds resulting from this proposal.
9.	UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES: Are any federally listed threatened or endangered species or identified habitat present? Any wetlands? Sensitive Species or Species of special concern? Are cumulative impacts likely to occur as a result of this proposed action?	[N] There are no endangered or threatened species or habitat present on this site.
10.	HISTORICAL AND ARCHAEOLOGICAL SITES: Are any historical, archaeological or paleontological resources present?	[N] During the field inspection there were no historic sites found. The lease records also indicated no cultural sites present.
11.	AESTHETICS: Is the project on a prominent topographic feature? Will it be visible from populated or scenic areas? Will there be excessive noise or light? Are cumulative impacts likely to occur as a result of this proposed action?	[N] There are no prominent topographic features in the proposed area.
12.	DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, and AIR OR ENERGY: Will the project use resources that are limited in the area? Are there other activities nearby that will affect the project? Are cumulative impacts likely to occur as a result of this proposed action?	[N] There are basically only two major industries within this proposed area. They are agricultural and petroleum industries and both work quite well together.
13.	OTHER ENVIRONMENTAL DOCUMENTS PERTINENT TO THE AREA: Are there other studies, plans or projects on this tract? Are cumulative impacts likely to occur as a result of other private, state or federal current actions w/n the analysis area, or from future proposed state actions that are under MEPA review (scoping) or permitting review by any state agency w/n the analysis area?	[N] None

	III. IMPACTS ON THE HUMAN POPULATION	
	RESOURCE	[Y/N] POTENTIAL IMPACTS AND MITIGATION MEASURES
14.	HUMAN HEALTH AND SAFETY: Will this project add to health and safety risks in the area?	[N] This project will not add to the health and safety of the area.
15.	INDUSTRIAL, COMMERCIAL AND AGRICULTURAL ACTIVITIES AND PRODUCTION: Will the project add to or alter these activities?	[Y] The results of this project will contribute to the oil production of the area. This particular area is dependent upon

	both the petroleum and agricultural industries.	
16. QUANTITY AND DISTRIBUTION OF EMPLOYMENT: Will the project create, move or eliminate jobs? If so, estimated number. Are cumulative impacts likely to occur as a result of this proposed action?	[Y] This project will and has created several new jobs. The project required drilling and construction contractors. There will also be some technical contracting jobs created once the system is up and running.	
17. LOCAL AND STATE TAX BASE AND TAX REVENUES: Will the project create or eliminate tax revenue? Are cumulative impacts likely to occur as a result of this proposed action?	[Y] This project will create tax revenue from the increased sale of oil.	
18. DEMAND FOR GOVERNMENT SERVICES: Will substantial traffic be added to existing roads? Will other services (fire protection, police, schools, etc) be needed? Are cumulative impacts likely to occur as a result of this proposed action?	[N] Cumulative impacts resulting from traffic are not anticipated as a result of this proposal. During the construction phase of the project, there will be an increase in area traffic however.	
19. LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS: Are there State, County, City, USFS, BLM, Tribal, etc. zoning or management plans in effect?	[N] None	
20. ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES: Are wilderness or recreational areas nearby or accessed through this tract? Is there recreational potential within the tract? Are cumulative impacts likely to occur as a result of this proposed action?	[N] There are no wilderness or recreational sites accessed through this tract.	
21. DENSITY AND DISTRIBUTION OF POPULATION AND HOUSING: Will the project add to the population and require additional housing? Are cumulative impacts likely to occur as a result of this proposed action?	[N] None	
22. SOCIAL STRUCTURES AND MORES: Is some disruption of native or traditional lifestyles or communities possible?	[N] None	
23. CULTURAL UNIQUENESS AND DIVERSITY: Will the action cause a shift in some unique quality of the area?	[N] None	
24. OTHER APPROPRIATE SOCIAL AND ECONOMIC CIRCUMSTANCES: Is there a potential for other future uses for easement area other than for current management? Is future use hypothetical? What is the estimated return to the trust. Are cumulative impacts likely to occur as a result of this proposed action?	[Y] This project can benefit the State of Montana in terms of oil royalties produced from well production.	
EA Checklist Prepared By: Steve Dobson LUS Date: Name Title		

IV. FINDING			
25. ALTERNATIVE SELECTED:	Approve the water flow pipeline project under the oil and gas lease.		
26. SIGN4IFICANCE OF POTENTIAL IMPACTS:	Short-term and small-scale impacts to the native rangeland under and around the pipeline route is expected. All disturbed areas will be recontoured and reseeded to native grass according to the specifications outlined in this EA. No known archaeological sites are located within the project area. The School Trust will economically benefit from this project by providing a water source for the water flood project. This will likely increase oil production from state wells in the area. Actual damages and surface damages have been settled. Overall, no negative environmental impacts are expected.		
27. Need for Further Environmental Analysis: [] EIS [] More Detailed EA [X] No Further Analysis			
EA Checklist Approved By: <u>Erik Eneboe</u> Con Name	rad Unit Manager - CLO Title		

Signature

May 21, 2007 Date